

**EMERGENCY AMBULANCE SERVICES
AND
INTER-HOSPITAL PATIENT TRANSPORT SYSTEM
IN NOVA SCOTIA**

"STRATEGIES FOR THE NINETIES"

RECOMMENDATIONS

1. MISSION STATEMENT:

The purpose of an emergency ambulance system is to reduce morbidity and mortality from sudden illness or trauma. It should respond, provide appropriate care and transport the patient to the appropriate medical facility in the best possible condition. The purpose of a patient transport system is to provide a rational system of inter-institutional and hospital patient transfers.

2. TYPES OF SERVICE:

Service delivery can be categorized and prioritized as follows:

a) Emergency Services (unscheduled) including Urgent Transfers:

To provide timely and appropriate emergency treatment and transportation of patients to medical care facilities in a cost effective manner.

b) Non-Urgent (Scheduled) Patient Transfers:

To provide safe, cost effective, patient transportation system, both local and regional, while ensuring maintenance of patient care and safety.

- c) **Services Provided on Behalf of Medical Examiners:**
To provide a body transport service at the request of medical examiners in all areas of the Province. In some cases body removal services may be urgent, however, they would be of a lower priority than emergency services.
- d) **Body Removal Service:**
Where funeral homes and body removal services may not be readily or economically available, ambulances at times may be used for body removals, particularly in situations where an ambulance is requested in response to an emergency situation. Ambulance vehicles should not be involved in situations where the ability of the ambulance service to respond to emergencies may be compromised.

3. PROGRAM GOALS

Ambulance service delivery in Nova Scotia should encompass the following broad parameters:

- 1) **The service is medically accountable:**
Having the necessary medical supervision and control mechanisms in place to ensure accountability for patient care in both the pre hospital and hospital phases of Emergency Care.
- 2) **The service is accessible Province wide:**
Provide emergency ambulance services in a timely fashion, emergency treatment, transportation and access to definitive care, province wide.
- 3) **Ambulance services are comprehensive:**
Based on the fifteen components of a comprehensive E.M.S. System, ambulance services will be a major component. (see recommendation #9).

4) An integrated delivery system:

All components of the system are organized and structured towards coordinated and timely response to the Emergency needs.

5) The system is cost effective:

Providing the best care at a cost which is acceptable and justifiable to the people of Nova Scotia.

4. LEGISLATION & REGULATIONS GOVERNING THE AMBULANCE INDUSTRY IN NOVA SCOTIA

The Committee recommends that those recommendations contained in this report which are appropriate for Provincial Legislation and Regulations be developed and enacted at the earliest possible date. It further recommends that the Health Services & Insurance Commission and/or the Department of Health & Fitness be provided, through legislation, with the necessary authority to effectively implement these recommendations and to act as the regulatory body.

Legislation should encompass much of the broad recommendations of this report including the licensure requirements, service delivery and the regulatory bodies to administer the legislation. The regulations should include the minimum standards and guidelines for the provision of ambulance services in Nova Scotia, training requirements, response times, communications, and any other regulatory functions contained within this report.

5. MANAGEMENT INFORMATION SYSTEM

The current system for claims processing and management information systems is a completely manual system. It is recommended that a high priority be given to fully automate

the claims processing and management information systems, to provide an adequate system of claims processing and introduce a management information system which is not now present.

5.1 Claim Forms (Form "A"):

The current reporting system for ambulance operators requires additional registration, administrative, and clinical data in order that appropriate information can be provided for clinical applications, claims audit and assessment data. It is recommended that a revised claims reporting system be implemented as soon as possible.

5.2 Automated Claims Processing System:

Currently, all claims submitted for payment for both emergency and inter-hospital transports are processed manually. It is recommended that this system be automated and integrated with provincial registration data and to be processed electronically through the Department of Health's computer system. As a part of this process, provision should be made for electronic claims submissions by operators to accept disc and tele-transmitted data.

5.3 Management Information Systems:

Information required for administrative and planning purposes is not now available in a comprehensive, timely basis. It is recommended that with the additional claims data and an automated claims processing system, a management information system be developed to include detail data analysis for administrative and planning purposes.

6. EDUCATION & TRAINING FOR AMBULANCE PERSONNEL:

- 6.1 It is recommended that a uniform and accessible training program for ambulance personnel be established by, or in conjunction with, a recognized teaching institute to train students to the Emergency Medical Attendant level (E.M.A.1) and that the program be accredited by the Canadian Medical Association.
- 6.2 Although the E.M.A.(1) Program is the base level qualification of ambulance personnel, opportunities should be provided for additional education/training that is appropriate for local needs and service delivery.
- 6.3 The E.M.A.(1) Program should be five months in duration and be characterized by:
- a) classroom didactic component - 300 hrs.
 - b) a clinical internship program of 300 hrs. with a designated high volume ambulance service is required and will be approved by the Health Services and Insurance Commission in conjunction with a teaching facility.
 - c) in addition to the conventional clinical training requirements, training should be provided for driver training, communications, medical terminology, inter-personnel skills, and patient handling.
- 6.4 It is recommended that an organized first responder program be developed and characterized by minimum first aid, CPR, instruction on airway management, cervical spine control, haemorrhage control, and patient movement skills. New skills may need to be added as new technology is developed. It should be provided for such

groups as fire and police departments, certain ambulance services, volunteer organizations and individuals. The program should be developed in conjunction with a recognized training facility, ambulance operators, and such volunteer groups as the St. John Ambulance, Canadian Red Cross, etc.

6.5 That an E.M.A.(1) refresher program be developed and integrated with a licensure/registration program for ambulance personnel. The refresher program should be organized centrally through the training institute and be mandatory to continue current licensure. The program should be delivered on a regional basis, be of 30-40 hrs. in duration and include topics and training specifically aimed at new advances in pre-hospital care. It is recommended that attendance at a refresher course be mandatory every two years in order to maintain licensure and registration for ambulance personnel.

6.6 It is recommended that annual licensure/registration of E.M.A.(1)'s be required and characterized by:

- a) E.M.A.(1) certification in Nova Scotia or equivalency,
- b) completion of E.M.A. refresher courses as required,
- c) be administered by a provincial authority.

6.7 It is recommended that the Provincial Training Program have appropriate medical direction.

6.8 It is recommended that after the third complete year of the revised E.M.A.(1) training program being implemented, all new ambulance personnel will require E.M.A.(1) training prior to employment as an ambulance attendant. It is further recommended that for those ambulance

personnel employed as of the date of implementation of the revised training program who have not yet achieved the E.M.A.(1) standing, a three year grace period be established after which time full licensure/registration will be dependent upon the completion of the training program.

7. GUIDELINES & MINIMUM STANDARDS:

7.1 Dress Code/Ambulance Personnel:

It is recommended that a uniform dress code should be designated to provide a professional appearance with consideration for the safety and comfort of ambulance personnel. Guidelines for ambulance personnel dress codes are included in Appendix "A".

7.2 Equipment - Ambulance Vehicles:

It is recommended that all ambulance vehicles be equipped to provide basic life support, safety and comfort for the patient, and appropriate and safe accommodations for ambulance personnel. (Appendix "B" lists minimum equipment to be available to all ambulance vehicles.)

7.3 Communications:

It is recommended that the current system of radio communications, utilizing the Integrated Health Care Network, be maintained.

7.4 Communications/Dispatch:

It is recommended that regional dispatch/communications be implemented for areas and services within a defined region where it can be demonstrated that improved communications will provide for better patient access to ambulance services. Each region or management area should explore the benefit of a central dispatch system

and an improved co-ordinated mutual aid agreement, particularly in times of low demand. Regional dispatch and co-ordination of intra-regional inter-hospital transports is also strongly recommended.

It is further recommended that inter-hospital transports, involving two or more regions or management areas, should be co-ordinated at the provincial level and, where possible, eliminate inefficient service delivery and avoid the provision of duplicated services. Financial compensation may have to be considered to compensate operators and/or regions where there are major shifts in providers of such services.

7.5 911 Emergency Number:

Planning and implementation of a Provincial 911 emergency number is in progress and, consequently, it is recommended that all ambulance services be encouraged to participate in the 911 system.

7.6 Response Times:

It is recommended that dispatches to all emergency ambulance requests will be 5 minutes or less from the time the request is made to the vehicle being activated. This dispatch time is considered to be the maximum for all areas of Nova Scotia. Regional and metropolitan areas should develop dispatch times appropriate to their own areas.

7.7 Ambulance Vehicle Staffing:

It is recommended that the minimum level of staffing required for emergency and/or inter-hospital transports will be two attendants. Although two E.M.A.'s would be desirable, it is recommended that one of the attendants must have an E.M.A. designation and the driver must be in

possession of a first responders certificate and a Class IV drivers licence with appropriate driver training. However, certain ambulance services may apply to the Commission for status to have one E.M.A. and a first responder as driver. It is recommended that individual operators establish maximum working hours pertaining to ambulance attendants/drivers to ensure quality of patient care, driving competency and safety.

7.8 Vehicle Design & Maintenance:

It is recommended that all ambulance vehicles be designed to meet the minimum guidelines as outlined in Appendix "C" subject to a cost benefit analysis of features included. It is recommended that, in addition to the mandatory annual inspection required by the Department of Transportation, that all ambulance vehicles be inspected for mechanical defects, equipment, safety considerations, and general appearance, on an annual basis. Additional inspections may be required as a follow-up to regular inspections.

8. SERVICE DELIVERY:

While it is recognized that the overall system of providing emergency ambulance services and inter-hospital transfers provides a level of accessibility to all areas of the Province and for the most part is provided in a cost effective manner, there are regional variations as to the quality and quantity of services provided. It is felt that with some modification in service delivery, that the level of service can be improved, while at the same time, implementing a managed growth strategy. A rational approach to service delivery is required in order to fulfil the goals and objectives of the Program for the good of all Nova Scotians.

8.1 Organizational Framework:

It is recommended that the administration and funding of the Nova Scotia Ambulance Subsidy Program remain with the Health Services & Insurance Commission or its replacement structure under the reorganized Department of Health and Fitness.

The role of the Commission, in relation to ambulance services, should continue as follows:

- (a) Advise Government on legislation, regulations and standards;
- (b) Develop and implement major policy initiatives;
- (c) Funding and claims payments;
- (d) Program guidelines for training and education;
- (e) Ambulance services role in Provincial Disaster Planning;
- (f) Management information systems;
- (g) Establishment of a standing Ambulance Services Advisory Committee, reporting to the Commission, which will include a medical advisory role and disputes settlement mechanism.

8.2 Regionalization:

It is recommended that regional and sub-regional advisory groups be established within regions and/or management units to promote the planning of ambulance service delivery, communications, central dispatch, and regional ambulance disaster planning. Regional advisory groups could include the Ambulance Operators Association of Nova Scotia, individual ambulance operators, hospital representatives, ambulance medical and nursing personnel, and representatives of the Commission.

8.3 Ambulance Services Advisory Committee:

It is recommended that the Commission and/or its replacement organization should develop a standing ambulance services advisory committee with appropriate subcommittees to advise the Commission/Department of Health on matters related to ambulance services delivery in Nova Scotia. The specific mandate and structure of this committee should be determined by the Commission. It is recommended that the Advisory Committee be comprised of the following:

- a) one Commissioner;
- b) one representative from the Medical Society of Nova Scotia;
- c) one representative from the Department of Health & Fitness or the Nova Scotia Association of Health Organizations;
- d) three representatives from the staff of the Health Services and Insurance Commission;
- e) three representatives from the Ambulance Operators Association of Nova Scotia;
- f) one representative from the Registered Nurses Association of Nova Scotia;
- g) one representative of the Nova Scotia Society of Ambulance Personnel.

A case has been made for both urban and rural representation from several of the groups named above. This would result in an overly large committee but such representation can be accommodated in the sub-committee structure which will support the main committee.

8.4 Duplicated Service Areas:

With the input of the Commission, the Ambulance Operators Association and local operators, plans should be put into place as soon as possible to eliminate duplication of service areas. It is recommended that financial assistance be considered depending on the extent of change necessary to eliminate duplicate service areas. A review of existing duplicated service areas should be a priority.

8.5 Service Areas and Boundaries:

Several areas within the Province may be considered duplicate areas if boundaries are re-assigned based on cohesive service areas. The Commission, in conjunction with the Ambulance Operators Association, should redefine boundaries and eliminate the subsequent duplicated areas. It is further recommended that priority be given to the review of boundaries and service areas in conjunction with the implementation of 911.

8.6 Provision of Services:

- (a) It is recommended that all ambulance services (subsidy and non subsidy services) including emergency services and inter-hospital transport must be licensed. Licensed operators must maintain current registration and meet the minimum standards for the delivery of service based on the following general parameters:

- (i) All new operators must be licensed to operate within Nova Scotia.

- (ii) All existing operators (currently providing services under the subsidy program) must be accredited every three years. Accreditation will be based on standards established by the Province and accreditation must be current in order to maintain operator licenses.
- (b) The Health Services and Insurance Commission will be the agency responsible for licensing ambulances. Licenses can be revoked at any time by the Health Services and Insurance Commission with just cause.
- (c) All appeals will be made to the Minister and the Minister's decision will be final.
- (d) Individual ambulance operators will be licensed for all or any of the following ambulance services as mutually agreed by the Health Services and Insurance Commission and the operator:
 - 1. scheduled and unscheduled calls;
 - 2. request of the medical examiner/Fatality Inquiries Act;
 - 3. body removal service.

The Committee recognizes that scheduled and unscheduled ambulance services may be separated but the cost implications of such a division may result in a system that is not cost effective.

8.7 Monitoring/Quality Assurance:

It is recommended that the Health Services and Insurance Commission, through the Ambulance Services Advisory Committee, in conjunction with the Ambulance Operators Association, will put into place a mechanism whereby

standards and quality assurance programs can be effectively implemented and monitored. The program should include statistical reviews, on-site inspections, and a formal review mechanism to receive and act upon complaints received from health care providers and the general public.

8.8 Communications Dispatch:

It is recommended that regional dispatch/communications be implemented for areas and services within a defined region where it can be demonstrated that improved communications will provide for better patient access to ambulance services. Each region or management area should explore the benefits of a central dispatch system and an improved coordinated mutual aid arrangement, particularly in times of low demand. Regional dispatch and coordination of intra-regional inter-hospital transports is also strongly recommended.

It is further recommended that inter-hospital transports, involving two or more regions or management areas, should be coordinated at the provincial level and, where possible, eliminate inefficient service delivery and to avoid the provision of duplicated services. Financial compensation will have to be considered to compensate operators and/or regions where there are major shifts in providers of such services.

8.9 Future Funding Systems:

It is recommended that future payment for subsidized services and user fees continue to be negotiated by the Health Services and Insurance Commission and the Ambulance Operators Association. That third party uninsured services such as WCB, DVA, and fees for private

insurance, continue to be negotiated between the Ambulance Operators Association and these interested parties.

It is further recommended that the Health Services and Insurance Commission and the Ambulance Operators Association investigate other types of funding systems.

It is recommended that future funding systems and legislation ensure that unscheduled emergency response capabilities are maintained and not eroded by the potential conflict provided by the more lucrative and predictable scheduled transports.

9. EMERGENCY MEDICAL SERVICES SYSTEM INTERFACE:

It is recognized that ambulance services, scheduled or unscheduled, are but only a part of emergency medical services. Although the ambulance service is a major component of the Emergency Medical Services System, the successful delivery of pre-hospital care is contingent upon multiple components of the Health Care System.

It is therefore recommended that the Department of Health & Fitness and regional planning initiatives broaden the concept of ambulance services to adopt the concept of Emergency Medical Services System. Proposals submitted and endorsed by the Medical Society and the Registered Nurses Association of Nova Scotia have developed a blueprint for a broad Emergency Medical Services System to include:

- (1) manpower requirements, including first responders, ambulance, medical nursing and hospital personnel;
- (2) training programs for ongoing, continuing medical and pre-hospital care training;

- (3) appropriate emergency care facilities strategically located throughout the Province;
- (4) access to critical care units;
- (5) efficient inter-hospital transfer systems;
- (6) standardized emergency and inter-hospital transports systems;
- (7) integrated communications systems;
- (8) accessibility to pre-hospital care;
- (9) public information and education as to appropriate access to this system;
- (10) consumer participation in planning and program development;
- (11) standardize medical records;
- (12) communication links with public safety agencies, including police, fire, and EMO;
- (13) linkage of ambulance services with overall disaster planning;
- (14) mutual aid agreements between neighbouring communities;
- (15) evaluation and review by health care planners and providers.

Although it was not within the scope of the Advisory Committee to address all of these areas, it was felt that if the foregoing recommendation is accepted, the ground work for broader planning related to emergency medical/ambulance services will be enhanced.